

METHODS OF GRADING BOYS IN PHYSICAL EDUCATION CLASSES
IN SELECTED IOWA HIGH SCHOOLS

A Field Report
Presented to
The Graduate Division
Drake University

In Partial Fulfillment
of the Requirements for the Degree
Master of Science in Education

by
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August 1968

1968
G 784

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CHAPTER I

INTRODUCTION

There is no standardized procedure for grading physical education, but neither is there one system, universally accepted, in other areas of education. Evaluating student progress and assigning grades is one of the most perplexing problems confronting physical education teachers. Teachers use their own plans based on training, experience, and their individual philosophies of education. There are almost as many different plans for grading as there are teachers of physical education. Many of these grading practices are educationally unsound. There is too much variation in some schools.¹ Reporting pupil progress and achievement is probably the weakest of all teaching procedures in physical education.² However, some teachers have very practical and valid methods of grading physical education. The professional physical educator owes it to himself, his profession, his students, and their parents to use a fair method of assigning grades, and

¹L. W. McCraw, "Principles and Practices for Assigning Grades in Physical Education," Journal of Health, Physical Education, and Recreation, XXXV (February 1964), 24-25.

²William H. Solley, "Grading in Physical Education," Journal of Health, Physical Education, and Recreation, XXXVIII (May 1967), 35-36.

to use a method that is compatible with the basic principles and practices of grading.

I. THE PROBLEM

Statement of the problem. It was the purpose of this study to identify the methods of grading boys in physical education classes in AA Iowa high schools.

Need for the study. There was a need for this study to determine if the procedures used in grading boys in physical education classes in selected Iowa high schools, were similar or compatible with generally accepted or suggested practices of grading.

Limitations of the study. This study was limited to the methods used to determine grades by boys physical education teachers in the fifty-one reporting AA high schools of Iowa during the 1967-68 school year.

II. DEFINITIONS OF TERMS USED

AA high schools. AA high schools are defined as the largest sixty-four high schools in the state of Iowa based upon their three-year average daily attendance of students in the 10th, 11th and 12th grades, starting with the school year 1962-63, as computed by the Iowa

High School Athletic Association.

Physical education. Physical education is defined as a program of activities under instruction of supervised personnel promoting physical, mental social, and emotional development through physical activity.

III. PROCEDURE

A review of available literature was made to establish the generally accepted principles and practices of grading. After reviewing the literature, a questionnaire was formulated and sent to twenty boys physical education instructors in class A Iowa high schools to be validated.

Upon the return of the validated questionnaires, the final questionnaire was developed and distributed to the boys physical education instructors in the sixty-four AA Iowa high schools. Fifty-one or eighty per cent of the questionnaires were returned.

The data, obtained from the responses to the questionnaire, were tabulated and presented in an informative manner.

CHAPTER II

REVIEW OF THE LITERATURE

I. PRINCIPLES OF GRADING PHYSICAL EDUCATION

A review of the literature found that much has been written concerning grading in physical education. A majority of the articles that appear in periodicals present a system of grading that is used by professional physical educators. A study of this literature reveals that almost all were systems that were compatible with the basic principles and practices of grading.

Since the existence of physical education in the educational curriculum, it has been apparent that no single method of evaluating physical education pupils has been in use. Pupils, programs, and emphasis differ, so it is evident that grading methods would differ.¹ Exploration and research is still needed in the field of grading physical education, but most educators feel enough is known to provide a sound basis for grading.

According to McCraw, physical education grades should be based on all objectives of the course, with special emphasis on skill

¹Cliff Trump, "Meaningful Grading," Scholastic Coach, XXXV (January 1966), 44-46.

and/or physical fitness. The objectives should be within the students capacity to attain and be considerate of his ability to improve. The grading procedures used for physical education should be the same as other subjects in the school or school system. In determining physical education grades, the curve should be used and there should be no comparison of students. Both subjective and objective instruments should be used in determining a student's grade. Such instruments would include attendance records, teacher observation, objective tests, student evaluation, and written tests. When the grading procedure has been developed, then the students should be informed of the grading procedure.¹

According to Barrow, physical education grades should have a definite relationship to the objectives of the program. The student's physical education grade should indicate his degree of proficiency in the established objectives of the program. Physical education grades should have validity. The grade should efficiently measure the factors which they are intended to measure. Physical education grades should be reliable with accuracy and consistency when being reported. Physical education grades should be easy to understand, both to the student and to his parents, and contain factors which are measureable; such as

¹L. W. McCraw, "Principles and Practices for Assigning Grades in Physical Education," Journal of Health, Physical Education, and Recreation, XXXV (February 1964), 24-25.

skill in the activity, fitness, motor ability, posture, game performance, written tests, and some subjective evaluation of such factors as attitude, appreciation, sportsmanship, cooperation, citizenship, leadership, and sociability. Barrow does not advocate the use of effort, improvement, attendance, showers, uniforms, interest, and punctuality, as grading factors.¹

Literature shows that extensive research into the subject of grading has been done, and as part of this research, a set of specifications has been developed to help physical educators have a sound grading program in physical education. Among these specifications, emphasis is placed on the need for the physical education grade to represent the degree of achievement that the student has made toward the general objectives of physical education. The objectives of the program should be identified and made known to the students; and should include components of organic development, neuromuscular skills, mental development, and human relations adjustment. The physical education grade should be scored on the basis of the five-step interval, such as A, B, C, D, F and valid and reliable tests should be used, where applicable, to objectively measure such components as strength, speed, endurance, power, agility, motor skills,

¹Harold Barrow, Rosemary McGee, A Practical Approach to Measurement in Physical Education. (Philadelphia, Pennsylvania: Lea and Febiger, 1964), pp. 436-41.

recreational skills, and game rules. Devices such as rating scales and check lists, should be used to subjectively evaluate such components as team play, attitudes, sportsmanship, and posture. The physical education student should be aided through guidance, counseling, and placement. He should be given a chance to avoid failure by being given the opportunity to succeed at his own level of skill ability through a classified physical education program. The classification of the student should be noted on the school record and on the report to the parents, with the student's grade being computed by averaging the scores of the components of each major objective. Whenever administratively feasible, the report card should show a grade for each of the general objectives of the program and a list of the major activities participated in during the grading period.¹

Blanchard and Collins stated that definite standards must be set up in any method of grading. They said that if a series of grades is given, one final grade should be determined and they offered suggested methods. Among these suggestions, is the use of discussion and a checking system, through which a combination of teacher's judgment and pupil's judgment can be achieved. According to Blanchard

¹Charles Bucher, Constance Koenig, and Milton Barnhard, Methods and Materials for Secondary School Physical Education. (Saint Louis: C. V. Mosby Company, 1961), p. 269.

and Collins, effort, attitude, cleanliness of uniform, leadership, intramural participation, showers, health instruction, skills in sports, dance, and stunts, might serve as a basis for grading if definite records are kept. The use of the point systems and accomplished tests, might also serve as aids in any method of grading. The physical education student should never be graded in items over which they have no control and an attempt should be made by the instructor to relate the student's performance to his ability.¹

Research has indicated that there are problems which lead to poor evaluation such as heavy pupil loads, frequent grading periods, and numerous and completely different objectives to be evaluated. However, in spite of such problems, Solley stated that it is unnecessary to grade students in physical education more than once or twice each year, and that the major goals of the program should be evaluated only when warranted. Solley suggested no more than one or two physical fitness tests per school year with the evaluation of specific sports skills to be determined during each unit. A single consolidated knowledge tests can be given once each semester. Solley suggested the use of time-saving techniques such as the use of student leaders and partner methods of administration and scoring in tests, and the unit system

¹Vaughn S. Blanchard and Laurentine B. Collins, A Modern Physical Education Program for Boys and Girls. (New York: A. S. Barnes and Company, 1940), p. 15-16.

of teaching.¹

Physical educators must attain some sort of grading consistency among themselves before consistency can be reached with the other education areas. In an attempt to attain this consistency, Singer advocated that all students should be tested for motor coordination and fitness, with the lowest placed in special classes. Activities in physical education, like other educational areas, should be divided into different skill levels according to the students ability to perform. The grading procedures used by the physical education teachers, should be clearly outlined and made known to the students. The student's final physical education grade, should be based on achievement on a written test, skill tests, and/or observation during play. From here it is up to the physical education teacher to modify the grades according to the student's attitude and interest.²

Mathews stated that the final grades placed on the report card should be of the same kind as those in other subjects. In order to attain uniformity, the physical education instructor needs to conform his

¹William H. Solley, "Grading in Physical Education," Journal of Health, Physical Education, and Recreation, XXXVIII (May 1967), 35-36.

²Robert N. Singer, "Grading in Physical Education," Journal of Health, Physical Education, and Recreation, XXXVIII (May 1967), 38-39.

grading method with that of the school administration. The physical education grade should be interpreted, so that the methods used in arriving at a given grade are made known to the pupil, the parent, and the school administration. The physical education grade should leave little doubt in anyone's mind as to what it means. The physical education grade should reflect the progress that the pupil has made toward achieving the class objectives in relationship to the emphasis placed upon each activity.

Mathews advocated that the grading system should be based upon the teacher's objectives. Hence, the degree of proficiency that the student attains in the stated objectives would constitute the grade. This means that the areas of physical education which are to be measured have to be clearly established. The grading system, however, should not be too time consuming.¹

II. SYSTEMS OF GRADING PHYSICAL EDUCATION

Davis and Lawther stated that teachers usually must cooperate with the school administration in using the grading plan in operation in the school system. This, however, is no reason for not knowing the characteristics of a few grading plans being used.

¹Donald K. Mathews, Measurement in Physical Education, (second edition; Philadelphia and London: W. B. Saunders Company, 1963), p. 316-17.

Per cent system. The per cent system is still one of the most common grading plans in spite of the fact that it has been shown to be one of the poorest ways of grading. In this system, the pupil is graded on the basis of 100. There is a lack of consistency in determining what 100 represents. Does it represent perfect performance in skills in activities offered? Does it represent the best performance in class? Does it represent satisfactory performance, or greatest improvement?¹ Research shows that most authorities in physical education have agreed that the per cent system of grading is not recognized as a good system.

Letter system. The letter system is related to and developed from the per cent system. In the letter system, A usually represents ninety-five to 100, B represents eighty-five to ninety-five, C represents seventy-five to eighty-five and the scale continues down to a failing grade. This system avoids the difficulty of a teacher distinguishing between performances of eighty-two and eighty-three. However, the system fails to avoid this same difficulty at the joints ninety-four, ninety-five, and eighty-four, eighty-five; it overemphasizes differences in scores near these joints.²

¹Elwood C. Davis and John D. Lawther, Successful Teaching in Physical Education (second edition; New York: Prentice-Hall Incorporated, 1948), p. 575.

²Ibid.

Barrow and McGee stated that letter grades expressed as A, B, C, D, F and number grades expressed as 1, 2, 3, 4, 5 are essentially the same type. Whereas the number grades have not been used as extensively as the letter grades, the letter grades frequently must be converted to numbers when grade points are computed. Letter and number grades when administered in an acceptable manner may meet most of the criteria for good grading practices.¹

Two-division grading system. According to Barrow and McGee, the use of a two-division grading system, such as pass or fail, does not adequately indicate the status and achievement of any group. Such a grade fails to discriminate, is difficult to interpret, and provides no motivation.² Mathews stated that from the administrator's point of view, such a method prevents the faculty from knowing their own pupils, which in turn limits the efforts of the vocational and educational guidance departments.³

According to recommendations made by Ramme, a two-division system such as pass or fail can be used when the pupil-teacher load is over sixty. This method with all its disadvantages, is much better than

¹Barrow and McGee, op. cit., p. 447.

²Ibid., p. 450.

³Mathews, op. cit., p. 318.

no system at all. Ramme also recommended that where credit for physical education is less than one credit per year, a two-division system of grading would be practical.¹

Three-category plan. According to Barrow and McGee, the use of a three-category grading plan offers very little more than a two-division plan in the way of an acceptable system.² In this type of plan, the student's performance puts him into one of three groups, such as inferior, average, or superior.

Standard deviation technique. Barrow and McGee stated that the standard deviation technique could be employed in order to overcome some of the disadvantages of methods of grading. If this technique is to be used, there must be a sufficient number of students from an unselected group. The use of the standard deviation always assumes a normal distribution. This technique is implemented by securing the mean and standard deviation of all scores in the group to be graded. This method has been employed very little in the grading system of schools but it should be used a great deal more in the light

¹Edwin W. Ramme, "Methods of Grading in Physical Education in Selected High Schools in Illinois" (unpublished Master's thesis, DePaul University, Chicago, Illinois, 1954-55), p. 63.

²Barrow and McGee, op. cit., p. 450.

of its high rating in the criteria of grading systems.¹

Descriptive sentence method. Mathews stated that the descriptive sentence method, a recent development in grading, is a system that seems to be becoming popular in secondary schools. This method employs a written analysis by the teachers relative to the status of the pupil.² These comments are in the form of descriptive words of sentences which give a better analysis of what the instructor knows about the progress, or lack of it, in his students than do letter grades. However, for the instructor with a large number of students in his classes, such reports are prohibitive because of the burden in time spent.

Numerical method. Barrow and McGee said that the numerical method of grading is similar to the per cent system. In this method of grading, numerical scores are awarded and these scores are converted to letter grades. This relieves the instructor of having to differentiate between such levels of performance as a ninety or ninety-one. However, this may work as a handicap since this finer discrimination is sometimes needed to show small amounts of progress by the student.³

¹Barrow and McGee, op. cit., p. 449.

²Mathews, op. cit., p. 318.

³Barrow and McGee, op. cit., p. 448.

III. FACTORS USED IN GRADING PHYSICAL EDUCATION

Improvement. Improvement is often given consideration in grading. Improvement is important for all students but it is doubtful if it can be used successfully as a criterion for grading. Hanson stated that grading on improvement is invalid and unrealistic. Hanson acknowledged problems that may arise when using improvement as a primary criterion for grades in physical education. Performance must be measured carefully before and after each instructional unit. This is time consuming and Hanson suggested that the time used for the first measurement could be utilized more for instruction. It should be acknowledged that each student is at a different performance level at a given time and improvement potential varies with his relative status. The skilled performer will improve less than the unskilled, and the problem of which is to receive the lower grade is presented. It also must be recognized that the duration of the instructional unit must permit adequate time for improvement and a few class periods is not adequate.¹

Davis and Wallis stated that using improvement as a basis for grading presents problems, because some teachers, realizing the

¹Dale L. Hanson, "Grading in Physical Education," Journal of Health, Physical Education, and Recreation, XXXVIII (May 1967), 37.

weaknesses of grading on arbitrary standards, attempt to base their grades upon improvement in various elements of development. Some teachers, interested in equalizing the opportunity for students of various capacities to earn superior grades, feel that grading on the basis of improvement makes their grade more justifiable and fair. However, as Davis and Wallis pointed out, there is a weakness to this approach as well. It is difficult to determine the meaning of improvement. Many persons who advocate this approach fail to realize that students with the greatest capacity, who may score higher on initial tests, actually improve more than pupils who score lower on initial tests. Since some pupils start lower on the scale, they have more room for improvement.¹

Davis and Wallis advocated that pupils with the most capacity show more gain in the acquisition of skills; even though they may start higher, they also show greater gain. Improvement does not mean much unless the potential for improvement is considered. Final accomplishments are not always the result of what is learned in class. With relatively equal application of effort by all students in the class, it is difficult to assign a grade on a basis of improvement. Some pupils have capacity to improve, some already have prior experience

¹Elwood Craig Davis and Earl L. Wallis, Toward Better Teaching in Physical Education. (Englewood Cliffs, New Jersey: Prentice Hall, 1962) p. 388.

and may not be able to improve to a significant degree.¹

Barrow and McGee, like Davis, Hanson, and others, said that grades based on improvement are questionable. They stated that in the academic field, the grade is given on the basis of status at a particular time in the objectives of the course. If physical education is to be accepted in the academic family, then its grades must be reports of measure of status. Improvement is definitely included as part of status, but the grade should be based on status and not on the degree of gain. Barrow and McGee stated that it is difficult to evaluate improvement. They pointed out, as Davis and Wallis did, that the increment of gain varies in value. It becomes increasingly more difficult to improve as one moves nearer the ultimate.²

Another weakness in grading on improvement by means of objective tests is exemplified when the student knows his grade is based in part on improvement. The student may not do his best on the first administration of the test so that his range of improvement will be greater. It is difficult to tell when a student is not trying to do his best.

Effort. Effort is another factor which is given considerable

¹Davis and Wallis, op. cit., pp. 388-90.

²Barrow and McGee, op. cit., p. 442.

attention in the grading process. Barrow and McGee stated that the idea behind using effort as a factor of grading is that it serves to motivate students toward greater effort. Effort is similar to improvement, and is almost as difficult to evaluate. As a learner becomes more proficient, he is able to accomplish more with less effort. As he approaches the ultimate, the work load seems to be accomplished with ease. The highly skilled athlete makes his activity look easy. It is almost impossible to attach a value to such levels of effort. It does make sense, however, to grade on status which can be evaluated and which is definitely related to effort.¹

Hanson said effort is an attitude which is inappropriately considered in grading. The student is successful if he tries hard and appears to enjoy the class. This does not mean that he must learn or show evidence of achievement, but rather must come to class, do what is required and try hard. Hanson believed that effort can be measured by observation only, and pointed out that it takes an amazing teacher to accurately determine effort status for each of his students when he might be overwhelmed by the bookkeeping alone. Hanson also felt that grading according to effort is unfair because personality differences are involved.²

¹Barrow and McGee, op. cit., pp. 442-43.

²Hanson, op. cit., p. 37.

Attendance. Attendance is another factor which is commonly used as a basis for determining physical education grades. Research indicates that there are pros and cons regarding any system of grading which includes attendance as a grading factor. As pointed out by Barrow and McGee, those who reduce a grade because of excessive absences argue that the student cannot hope to achieve the objectives of the course, especially the more intangible ones, if he is not there. Those who oppose grading directly on attendance, contend that absences from class will be reflected in the achievement of the student anyway, and conclude that attendance is an inconsequential factor. Barrow and McGee inferred that it is probably true that the final status of any student in well organized physical education programs will be somewhat lower as a result of absences. If this were not true, the particular student is not being challenged in the class anyway. Attendance could become a part of the social grade, which is partly expressed in terms of effort. According to Barrow and McGee, attendance could be viewed as an administrative problem having no connection with the objectives of physical education. In this way attendance would have no direct influence on the student's grade.¹

¹Barrow and McGee, op. cit., pp. 441-42.

Hanson advocated that grading systems in which attendance constitutes a significant portion of the physical education grade are unfortunate, and that grading on attendance is ridiculous because it is against the school law to miss class.¹

In a study with fifty practice teachers who had just returned from their respective schools, it was found that in eighty per cent of the systems, the student's grade was based solely on his being present and in uniform daily.²

Hygiene, showers, and uniforms. Literature shows that grades which represent hygiene, showers, and uniforms, are held by many authorities to be inconsistent with modern philosophy and should be eliminated. Barrow and McGee felt these factors are important and should be emphasized, but they should not become major factors in grades. They are policies of the administration, and should be handled as such. There are rules concerning them, just as there are rules governing most student behavior in the schools. If these rules concerning uniforms and showers are violated, there probably should be some form of punishment for the guilty students, but not through a lower physical education grade.³

¹Hanson, op. cit., p. 37.

²Mathews, op. cit., pp. 313-14.

³Barrow and McGee, op. cit., p. 441.

Hanson acknowledged that wearing a clean uniform and taking showers are basic requirements that constitute a significant portion of the physical education grade. Hanson stated that whether or not students shower is important but is not one of the main objectives of physical education.¹

¹Hanson, op. cit., p. 37.

CHAPTER III

RESULTS OF THE STUDY

A total of sixty-four questionnaires were distributed to the boys physical education instructors of Iowa Class AA high schools. A total of fifty-one questionnaires were returned. This represents eighty per cent of the total number of forms distributed. These physical education instructors were surveyed concerning the methods they used to grade boys in physical education classes. The questionnaires received from these instructors were used in developing the results of the study as recorded in this chapter.

I. RESPONSES TO THE QUESTIONNAIRE

Grading symbols and methods used. The grading symbol most frequently reported was the letter grade used by forty-one schools. Sixteen schools reported awarding numerical scores and converting to letter grades. In all, the fifty-one respondents reported 110 methods of grading, indicating more than one method in use in many schools.

TABLE I

GRADING SYMBOLS AND METHODS USED TO REPORT PHYSICAL EDUCATION
PROGRESS IN FIFTY-ONE AA IOWA HIGH SCHOOLS,
1967-1968

Symbols and Methods	Number of Schools
Letter Symbol of A, B, C, D, F	41
Awarding of Numerical Scores and Conversion to Letter Grades	16
Awarding of Points with Grades Based on Number of Points Collected During a Specified Period of Time	9
Conversion of Percentages into Letter Grades	8
Number Symbol of 1, 2, 3, 4, 5	6
Words or Phrases in Check List Form	6
Predetermined Curve of Distribution	5
Awarding of Numerical Scores and Conversion to Number Grades	4
Securing the Mean and Standard Deviation of all Scores in the Class to be Graded	4
Conversion of Percentages into Number Grades	3
Subtraction of Points from Total Number of Points Given to Student at the Start of Grading Period	3
Satisfactory or Unsatisfactory Method	2
Credit or No Credit Method	2
Complete Sentence Description	1
	110*

*Schools reported more than one grading method.

Thirty-four respondents indicated that the method they used in grading their physical education classes was required by their respective school systems. Forty-five respondents reported that the final grade issued in physical education was the same type of symbol used for all other subjects in their schools. Thirty-four respondents indicated that they were satisfied with the method of grading they used.

Number of boys in physical education classes. Forty respondents listed the total number they instructed in physical education classes. This figure varied from 140 to 1,014. The average total number of students that each instructor was responsible for was 409. The remaining eleven respondents did not indicate how many students they were responsible for instructing.

Average sizes of physical education classes. The average size of boys physical education classes in the fifty-one responding schools was as follows:

<u>Average Size of Class</u>	<u>Number of Schools</u>
20	4
25	1
30	15
35	7
40	15

<u>Average Size of Class</u>	<u>Number of Schools</u>
45	0
50	5
60	2
80	1
100	0
120* or more	1

*121

Number of classes of physical education taught daily. The number of physical education classes taught daily in the fifty-one responding schools was as follows:

<u>Number of Classes Taught Daily</u>	<u>Number of Respondents</u>
1	1
2	0
3	4
4	8
5	29
6	8
7	1

Number of days each week that students meet for physical education. The number of days weekly that students were in physical

education classes were reported as follows:

<u>Number of Days Each Week</u>	<u>Number of Schools</u>
1	4
2	21
3	5
4	0
5	3
1 and 2 plan	3
2 and 3 plan	13
1, 2 and 3 plan	1
1 to 5 plan	1

Length of physical education class periods. The length of boys physical education class periods were reported as follows:

<u>Length of Class Periods</u>	<u>Number of Schools</u>
45 minutes	1
50 minutes	3
55 minutes	42
56 minutes	1
60 minutes	4

Amount of credit given for a year's work in physical education.

The respondents reported credit given as follows:

<u>Amount of Credit</u>	<u>Number of Schools</u>
0	17
1/8	5
1/4	15
1/2	11
1	3

Grading factors used. The grading factors in use in the subject schools were reported as follows:

<u>Grading Factor</u>	<u>Number of Schools</u>
Participation	48
Attendance Record	47
Attitude	47
Effort	45
Uniforms	40
Skills Tests	40
Improvement	39
Physical Fitness Tests	39
Sportsmanship	37
Hygenic Criteria	34
Knowledge Tests	28

<u>Grading Factor</u>	<u>Number of Schools</u>
Showers	21
Social Adjustment	21
Posture	6

Forty-eight schools indicated that they used no grading factors other than the ones above. The remaining three schools listed citizenship, responsibility, ability, and conduct as additional grading factors.

There was very little consistency in determining the per cent of the final physical education grade each grading factor was worth. Respondents indicated that the grading factors represented no definite percentage of the final physical education grade.

Frequency of administration of boys' physical fitness and skills tests. Of the forty-five schools reporting the use of tests, the frequency of use was as follows:

<u>Frequency of Fitness Tests</u>	<u>Number of Schools</u>
Twice Per Year	20
Every Nine Weeks	5
Once Per Year	2

<u>Frequency of Skills Tests</u>	<u>Number of Schools</u>
After Each Activity Unit	13
Varies With Units Presented	3
At Start and Finish of Each Unit	2

Twelve schools reporting the use of fitness tests and twenty-two schools reporting the use of skills tests did not indicate their frequency of use.

Record keeping. The methods of record keeping reported were:

<u>Method</u>	<u>Number of Schools</u>
Symbols in Record Book	41
Depend Mostly on Observation	34
Record on Student of Factors He Is Graded on but not on a Daily Basis	29
Use Rating Scale	24
Check List of Desirable and Undesirable Responses	20
Daily Record on Student of Factors He Is Graded On	15
Use Anecdotal Records	10
Use Self-appraisal Forms	7

Frequency of grade reports. The frequency of physical education grade reports, as indicated by forty-eight respondents was:

<u>Frequency of Issuing Reports</u>	<u>Number of Schools</u>
Once Each Six Weeks	2
Once Each Nine Weeks	30
Once Each Eighteen Weeks	16

Reporting forms. All fifty-one schools indicated the forms used in reporting boys' physical education progress were as follows:

<u>Forms</u>	<u>Number of Schools</u>
Standard Card, Such as Those Purchased from a School Supply Company	25
Printed Form to Suit Particular Needs of the Instructor	12
Letter Type Report	11
IBM Computer Type Report	3

Forty-seven respondents stated students in their schools were informed as to the factors utilized in determining their physical education grade.

CHAPTER IV

SUMMARY AND CONCLUSIONS

I. SUMMARY

It was the purpose of this study to identify the methods that were used to grade boys in physical education classes in AA Iowa high schools during the school year of 1967-68.

A review of literature was made to establish some of the generally accepted principles and practices of grading. Following a review of the available literature, a questionnaire was developed, validated and mailed to the sixty-four Iowa AA high school boys physical education instructors. Fifty-one questionnaires were returned for a percentage of eighty.

The investigator, in tabulating the results of the study, found that:

1. The grading symbol most frequently used was the letter grade, reported by forty-one schools.
2. Respondents from thirty-four schools reported that the grading method used was required by the school administration.
3. Forty-five schools indicated that the grading method in physical education was the one used throughout the school system.
4. Respondents from thirty-four schools indicated satisfaction with the grading method.

5. The average number of students instructed by the reporting schools was 409, with the range 140 to 1,014.
6. Class size numbers most frequently reported were thirty and forty, each size reported by fifteen schools.
7. Respondents in twenty-nine schools indicated that teachers taught five classes daily.
8. The most frequently reported number of days-per-week for classes was two, reported by twenty-one schools.
9. The most frequently reported length for class periods was fifty-five minutes, reported by forty-two schools.
10. The most frequently reported amount of credit allowed was none, reported by seventeen schools; fifteen allowed $1/4$ credit, eleven allowed $1/2$ credit.
11. The factors most frequently reported as important in grading were, in order, participation, attendance, attitude, effort, uniforms, skills tests, improvement, physical fitness tests, sportsmanship and hygienic criteria.
12. Twenty schools reported giving physical fitness tests twice yearly and thirteen schools gave skills tests after every activity unit.
13. Questionnaire responses regarding the amount of importance attached to various grading factors showed no identifiable pattern.

14. The most frequently reported methods of record keeping were by symbols in a record book, and by observation.
15. Grading reports were generally on a nine week basis. Thirty respondents indicated thus. The most frequently reported form was the standard card, used by twenty-five schools.

II. CONCLUSIONS

In general, Iowa AA schools are compatible with recommended practices in physical education grading.

Specifically the five-step interval recommended by Barrow and McGee; the use of the same grading system as in other classes, advocated by Mathews, Davis and Lawther; the use of the grading factors of skill tests, attendance and physical fitness tests endorsed by McCraw, of effort, participation and cleanliness advocated by Blanchard and Collins; and the giving of no more than two fitness tests yearly recommended by Solley were practiced by Iowa schools.

However, it is noted that Barrow did not recommend the use of effort, attendance and showers as grading factors and Hanson felt utilization of the factors of effort and attendance is unfair. Also thirty schools in giving grades once each nine weeks were exceeding the number recommended by Solley.

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APPENDIXES

APPENDIX A

3513 27th Street
Des Moines, Iowa

Dear Colleague:

I am conducting a study of the methods of grading boys in physical education classes in some selected Iowa high schools. This study is in partial fulfillment of the requirements for the degree, Master of Science in Education.

The purpose of this study is to determine if the procedures used in marking boys physical education classes in AA Iowa high schools, are similar or compatible with generally accepted or suggested practices of grading.

Would you please complete the enclosed questionnaire? Space is provided for your comments, and a stamped self-addressed envelope is enclosed for your convenience.

Names of schools or individual teachers will not be used in reporting the results of this study.

Thank you for your cooperation.

Sincerely yours,

Donald R. Graves

APPENDIX B

I. Questionnaire on Methods of Grading Boys in Physical Education Classes in Selected Iowa High Schools

Total Number of Boys in Physical Education Classes That You Instruct.
(Grades 10-11-12) _____

A. Check the blank opposite the method or methods you use in grading physical education classes.

1. Two Category Methods

- (a) Pass or Fail _____
 (b) Satisfactory or Unsatisfactory. _____
 (c) Credit or No Credit _____
 (d) Other _____

2. Three Division Methods

- (a) Satisfactory-Improving-Unsatisfactory _____
 (b) Above Average-Average-Below Average _____
 (c) Good-Fair-Poor _____
 (d) Other _____

3. Five Division Methods

- (a) Letter System, such as A, B, C, D, F _____
 (b) Number Grades, such as 1, 2, 3, 4, 5 _____
 (c) Other _____

4. Descriptive Methods

- (a) Complete Sentence Description _____
 (b) Words or Phrases in a Check List Form _____
 (c) Other _____

5. Percentage Methods

- (a) Predetermined Curve of Distribution. _____
 (b) Conversion of Percentages into Letter Grades. _____
 (c) Conversion of Percentages into Number Grades _____
 (d) Other _____

6. Numerical Methods

- (a) Awarding of Numerical Scores and Conversion to Letter Grades _____
 (b) Awarding of Numerical Scores and Conversion to Number Grades _____
 (c) Other _____

7. Point Systems

- (a) Awarding of Points with Grades Based on Number of Points Collected During a Specified Period of Time. _____
- (b) Subtraction of Points from Total Number of Points Given to Student at the Start of Grading Period _____
- (c) Other _____

8. The Standard Deviation Method

Securing the Mean and Standard Deviation of all Scores in the Class to be Graded _____

9. Method You Use Not Mentioned _____

B. Circle your choice of answers.

1. How many times a week does a student have physical education?
1 2 3 4 5 Other _____
2. How much credit is given on a year's work?
0 1/8 1/4 1/2 1 Other _____
3. How often are physical education grade reports sent out?
(a) once each six weeks
(b) once each nine weeks
(c) once each eighteen weeks
(d) other time schedule _____
4. What is the average size of your physical education classes?
20 30 40 50 60 70 80 90 100 Other _____
5. What is the length of your class periods?
30 minutes 35 40 45 50 55 60 Other _____
6. How many classes of physical education do you teach daily?
1 2 3 4 5 6 7 8 Other _____

C. Check Yes or No

Yes No

1. Is the method you use required by your school system? _____
2. Is the final mark given in physical education the same type of symbol that is used in other subjects? _____
3. Are you satisfied with the method you use? _____
4. Do you grade on:
(a) attendance record? _____
(b) improvement? _____
(c) knowledge tests? _____

	Yes	No
(d) showers?	___	___
(e) uniforms?	___	___
(f) effort?	___	___
(g) hygienic criteria, such as clean uniforms?	___	___
(h) attitude?	___	___
(i) sportsmanship?	___	___
(j) posture?	___	___
(k) participation?	___	___
(l) social adjustment?	___	___
(m) physical fitness tests?	___	___
(n) skills tests?	___	___
If yes on physical fitness or skills tests, how often?		

What per cent of the grade is each item checked yes worth?
Indicate on the dotted lines above.

5. If there are other factors which you grade on that are not mentioned, please list. _____

-
6. Do you keep symbols in your record book? ___ ___
7. Do you keep a check list of desirable and undesirable responses? ___ ___
8. Do you keep anecdotal records? ___ ___
9. Do you use a rating scale in keeping records for grading? ___ ___
10. Do you use a self-appraisal form? ___ ___
11. Do you depend mostly on observation for grading? ___ ___
12. Do you keep a daily record on each student of factors he is to be graded on? ___ ___
13. Do you keep a record on each student of factors he is to be graded on but not on a daily basis? ___ ___
14. Is the student told how his final physical education grade is determined? ___ ___
15. In reporting the progress of your high school students, do you:
- (a) use a standard card such as those purchased from a school supply company? ___ ___
- (b) or do you have a form printed to suit your own particular needs? ___ ___
- (c) or do you use a letter-type report? ___ ___
- (d) or do you use a type other than those mentioned? ___ ___
-

APPENDIX C

CLASS AA IOWA HIGH SCHOOLS

1. Albia
2. Ames
3. Atlantic
4. Bettendorf
5. Boone
6. Burlington
7. Carroll, Kuemper
8. Cedar Falls
9. Cedar Rapids, Jefferson
10. Cedar Rapids, Kennedy
11. Cedar Rapids, Regis
12. Cedar Rapids, Washington
13. Centerville
14. Charles City
15. Clinton
16. Council Bluffs, Abraham Lincoln
17. Council Bluffs, Thomas Jefferson
18. Creston
19. Davenport, Assumption
20. Davenport, Central

21. Davenport, West
22. Denison
23. Des Moines, Dowling
24. Des Moines, East
25. Des Moines, Hoover
26. Des Moines, Lincoln
27. Des Moines, North
28. Des Moines, Roosevelt
29. Des Moines, Technical
30. Dubuque
31. Dubuque, Wahlert
32. Estherville
33. Fairfield
34. Fort Dodge
35. Fort Madison
36. Grinnell
37. Harlan
38. Indianola
39. Iowa City
40. Keokuk
41. Knoxville
42. Manchester, West Delaware County
43. Marshalltown

44. Mason City
45. Mount Pleasant
46. Muscatine
47. New Hampton
48. Newton
49. Oelwein
50. Oskaloosa
51. Ottumwa
52. Sioux City, Central
53. Sioux City, East
54. Sioux City, Heelan
55. Southeast Polk
56. Spencer
57. Tama
58. Washington
59. Waterloo, Columbus
60. Waterloo, East
61. Waterloo, West
62. Waverly, Waverly-Shell Rock
63. Webster City
64. West Des Moines, Valley